customers, so that new customers are not inundated with calls intended for the disconnected customer. In short, aging intervals provide substantial benefits and valuable services to customers. Thus, there need to be reasonable intervals that numbers can be aged. At the same time, numbers should not be permitted to be aged indefinitely.

The NPRM notes that the INC has developed guidelines that contain recommended aging intervals.[70] These guidelines recommend aging residential numbers for 30-90 days; business numbers for 90-365 days; and high volume calling numbers for 18 months.[71] SBC believes that these guidelines strike the correct balance between efficiency and customers' needs. However, the guidelines list these intervals as "recommendations," not as requirements. To ensure that the guidelines are enforceable, these intervals should be mandatory. SBC thus recommends that the Commission direct the INC to make the proposed aging intervals requirements, and finalize the guidelines.

4. "Assigned" Numbers

The NPRM questions whether it should restrict the amount of time that a number can be classified as "assigned" while a customer service order is pending, such as three to five days.[72] However, such a restriction is unnecessary and may cause unjustified disruption for customers. When a number is assigned to a customer, the carrier has a strong incentive to complete the service order and activate the customer's service as soon as possible. Because carriers already have the incentive to complete the customer service order as soon as possible, an

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[69] *See NPRM* at ¶ 42.

[70] *See NPRM* at ¶ 42 n. 70.

[71] Industry Numbering Committee, Aging and Administration of Disconnected Telephone Numbers, Draft, at § 3.1 (March 22, 1999) <http://www.atis.org/atis/clc/inc/incwdocs.htm>.

[72] *See NPRM* at ¶ 43.

administrative requirement would serve little purpose.[73] Moreover, if a customer's service order was not fulfilled in the required interval, the customer would have to go through the inconvenience of securing a new telephone number.

5. Numbers Assigned to "Dealer Numbering Pools"

The NPRM seeks comment regarding how carriers characterize these numbers internally, and whether there should be any limitation on assigning numbers to dealers.[74] When these numbers are allocated to dealers, they are treated internally as assigned. If they were not, then a carrier might accidentally assign the same number twice – initially to one dealer, and then to an end user customer or other dealer.

A substantial amount of wireless service today is sold through dealer retailing arrangements, and any limitations on the numbers that could be assigned to dealer pools could adversely affect competition. Moreover, there is no suggestion at this time that wireless carriers are mischaracterizing numbers as assigned to dealer pools. Accordingly, there is no reason that this category should be restricted beyond the INC definition.[75]

6. "Ported Out" Numbers

The NPRM asks a number of questions about how ported numbers should be characterized for the purposes of calculating carrier numbering utilization.[76] The INC has spent substantial time considering this issue, and it properly concluded that the carrier assigned the telephone number from number administration should report the number as a "ported out"

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[73] Of course, if a carrier specified a number as "assigned" before the number was assigned to an end user customer, the carrier would improperly characterize the number and could be held responsible for such mischaracterization.

[74] *See NPRM* at ¶ 44.

[75] INC has revised the definition slightly from the form that it appears in the NPRM. The revision deletes the phrase "a set of" at the beginning of the definition.

number, and the carrier who receives the ported number should not include the number in its inventory.[77]

The INC definition proposes the only workable manner that ported numbers can be included in industry utilization calculations. If the carrier receiving the ported number counted that number in its inventory, the number would be double-counted and total number inventory for the NXX and NPA could not be verified against total assigned resources. If the carrier porting the number out did not count the number in its inventory (in order to eliminate the double counting), *neither* carrier's inventory would be verifiable against assigned resources. With potentially thousands (or tens of thousands) of ported numbers, it would be impossible to verify that each carrier had properly prepared and calculated its utilization rate.

Reporting of a ported number by the carrier who is assigned the resource also makes the most sense from a numbering administration perspective. The most important issue to numbering administration is determining how many unassigned and unused numbering resources are assigned to carriers. If a number is ported, it is being used, and is not available for assignment to another customer. However, it is included in the porting carriers' inventory, and if it is excluded from that inventory, utilization reports would understate the quantity of numbers assigned to the porting carrier. When a ported number is disconnected, it would return to the carrier assigned the numbering resource, and would not be available for the assignment by the carrier who received the ported number.

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[76] *See NPRM* at ¶ 45.

[77] In fact, the INC currently is considering changes to the definition of a "ported out" number to make it clear that the ported number is for "the exclusive use by the end user customer for whom the number was ported." The proposed revision clarifies that the number is not part of the porting carrier's inventory, and should not be considered part of the porting carrier's inventory.

7. "Reserved" Numbers

The NPRM correctly notes that the industry has been working to develop a definition of reserve numbers, and it lists industry-agreed upon characteristics of and broad guidelines for reserved numbers.[78] The NPRM questions whether these characteristics and broad guidelines are sufficient for the industry to fashion an appropriately limited definition of reserved numbers.[79]

SBC, which has participated in industry efforts regarding reserved number policies, believes that the characteristics and broad guidelines provide the necessary basis for the industry to develop a properly limited definition of "reserved" numbers, or (if appropriate) industry guidelines regarding number reservation. However, to the extent that the Commission believes that further restrictions are necessary or appropriate, SBC also supports MCI WorldCom's proposal that reserve numbers should be set aside for the future use of a specific customer under the terms of a legally enforceable written agreement (which would include, of course, tariffed services).[80] NANC is expected to issue a recommendation regarding reserved numbers at its August meeting.

Finally, reserved numbers should be part of the category of numbers that are "unavailable for assignment."[81] Numbers that are properly and legitimately reserved for customers *are* unavailable for assignment, and cannot be assigned to other customers. Excluding reserved numbers from utilization calculations would present misleading data to policy makers

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[78] *See NPRM* at ¶ 46-47.

[79] *See NPRM* at ¶ 48.

[80] *See NPRM* at ¶ 48. With a legally enforceable written agreement, it is not necessary to require that customers pay a separate, specific fee for reserved numbers. *See NPRM* at ¶ 49. The agreement itself provides the incentive to limit the number of reserved numbers.

[81] *See NPRM* at ¶ 48.

and, if it had any effect at all, could only discourage carriers from allowing customers to reserve numbers. Customers receive substantial benefits from being able to reserve blocks of numbers for future use, particularly business customers, and the competitive market should be allowed to meet this customer demand. The limitations proposed above are more than sufficient to ensure that numbers will be reserved only where there is a legitimate and specific customer need to do so.

8. "Soft Dial Tone" Numbers

SBC uses "soft dial tone" numbers primarily in high occupancy residential complexes that have substantial turnover (*e.g.*, apartment complexes, college dorm rooms). "Soft dial tone" allows service to be activated quickly, and because the numbers are in high turnover complexes, the numbers often are not idle for long. It is entirely appropriate to treat these as a form of "administrative" numbers, because they are held for administrative purposes, to expedite service processing.

9. Numbers "Unavailable For Assignment"

The numbers "unavailable for assignment" category represents the sum of "assigned," "administrative," "aged," and "reserved" number categories. The NPRM seeks comment on whether this definition is sufficient, or whether some of these categories (such as reserved numbers) should be excluded from this definition.[82] All of the categories of numbers included in the "unavailable for assignment" category are truly unavailable, and reporting these numbers accurately as part of the "unavailable" category can only assist policy makers in making informed numbering administration decisions (and, to the contrary, not including these categories

[82] *See NPRM* at ¶ 52.

in the "unavailable" definition might mislead policy makers to conclude that there are more available telephone numbers than actually exist).

10. "Assigned" Versus "Working" Numbers

The NPRM correctly notes that the definition of an "assigned" number developed by the INC overlaps in part and contradicts in part the definition of a "working telephone number" in the CO Code Administration Guidelines.[83] The "assigned" number category should replace the older "working telephone number" category in the CO Code Administration Guidelines, as the definition of "assigned" number is an improved definition, one that is part of a comprehensive set of numbering definitions. The "working telephone number" should be eliminated entirely and replaced with the "assigned number" category.

B. THE COMMISSION SHOULD ADOPT DETAILED REQUIREMENTS TO VERIFY CARRIERS' NEEDS FOR NUMBERING RESOURCES

SBC strongly supports verification of carriers' need for assignment of numbering resources. Over the past few months, there have been allegations that carriers have secured NXX codes in areas where they were not certificated to provide service. In some situations (particularly where state commissions have conducted utilization surveys), carriers have voluntarily returned a significant number of NXX codes, leading some to conclude that some carriers are requesting NXX codes well before they actually need them.[84] As the NPRM

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[83] *See NPRM* at ¶ 53.

[84] As the NPRM recognizes, telephone number shortages and the possibility of rationing increases the likelihood of carriers requesting codes unnecessarily. *See NPRM* at ¶ 57. This is exactly correct. Even the prospect of a shortage can create an artificial demand and exacerbate the shortage condition by creating a "run" on numbering resources. This situation is even more exacerbated by chronic shortages and rationing, such as in the State of California, where some area codes have been in rationing since late 1996. The only way to resolve such a situation is to provide adequate supply of numbers. For this reason that SBC has strongly advocated that state commissions need to implement timely and effective relief to avoid shortages.

recognizes, carriers receiving resources well in advance of when they will actually use them results in a "highly inefficient distribution of numbering resources."[85] In areas where SWBT provides local exchange service as an incumbent local exchange carrier, SBC is aware of more than *100 NXX codes* (over 1 million numbers) that appear opened in switches but are not interconnected with the routing tandems (they *appear* as if they are interconnected in the LERG).

Under these circumstances, it is necessary and appropriate for the Commission to adopt policies to ensure that carriers request and receive only the numbering resources that they actually need at the time they are assigned. Under no circumstances should carriers be denied the telephone numbers that they legitimately need to provide services in competitive markets; however, carriers should not be given numbering resources that they are not prepared to assign to customers.

1. Initial Codes

Verification of carriers' needs for initial numbering resources poses a special problem for policy makers. As explained in Section II.A above, the current high level of demand is primarily caused by requests of new entrants for resources to establish service area "footprint." This demand, in turn, manifests itself primarily (but not exclusively) in requests for "initial" codes. In order to make any headway in reducing area code demand, then, the Commission needs to address the high growth in demand for initial codes.

Initial code requests, however, cannot and should not be restricted, for if competition is to be allowed to function properly, carriers must be able to freely enter and exit markets. SBC agrees that the Commission should not adopt any policy that would "circumscribe any carrier's ability to obtain initial codes in order to initiate provision of service or to expand its

[85] *NPRM* at ¶ 58.

service 'footprint.'"[86] Instead, verification of need for codes must consist of two elements: (1) verifying that the requesting carrier is legally authorized to provide service in the requested area, and (2) verifying that the carrier is prepared to place the code "in service" by their requested code activation date. To accomplish these two goals, SBC recommends the following information be required as part of a request for assignment of an initial code.[87]

First, a carrier requesting an initial NXX code must provide proof to the NANPA that the carrier is certificated or licensed to provide service in the location where the numbers are to be assigned as part of the code request.[88] NANPA should be responsible for reviewing the certification/license documentation and ensuring that the carrier is authorized to provide service in the requested area. If NANPA has any question regarding the validity or accuracy of required documentation, or if the documentation is not provided, the NANPA should request that the relevant regulatory authority (the state commission for a wireline carrier or the Commission for a wireless carrier) verify that the carrier is authorized to provide service in the requested area. To avoid any undue delay in processing requests, the Commission should encourage state commissions to respond to these inquiries within one business day and the Commission should commit to responding to these inquiries regarding wireless services within one business day.[89] If

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[86] *See NPRM* at ¶ 58.

[87] The same requirements should apply to a pooling carrier who requests an initial block of 1,000 numbers.

[88] *See NPRM* at ¶ 59.

[89] *See NPRM* at ¶ 59. Regulatory bodies should be encouraged to meet this requirement by posting on their web sites each carrier authorized to provide service in the state, the type of services each carrier is authorized to provide (and thereby the type of code the carriers are permitted to receive), and the rate centers where each carrier is authorized to provide such services. This would simplify the verification of certification/licensure.

the NANPA has not assigned the code within seven business days, the carrier should be authorized to raise the issue with the Commission staff for resolution.

Second, the requesting provider should provide proof that it is be prepared to place the code "in service" by providing access to the PSTN by the code activation date, and not merely "opened" in the LERG.[90] A requesting carrier should be required to designate and certify: (a) the switch where the code will reside, and that this switch is in place and operating, or will be in place and operating by the code activation date, (b) the switch, if any, of other carrier that would be used the "routing points" to reach the carrier's switch, and that the carrier has interconnection agreements in place with the other carrier to allow traffic to be routed through those switches;[91] (c) that facilities are in place and operating, or are on order and are due before the code activation date, between the switches of other carriers and the requesting carrier's switch; and, (d) the inter-carrier test numbers that the carrier will use for the code. NANPA should be responsible for ensuring that the carrier has provided all such information and has made the appropriate certification(s) as a precondition to assigning the code.

NANPA should verify that the requesting carrier has a demand forecast on file, and that the requested code is in the carrier's forecast.[92] If the carrier has not provided a forecast, or the forecast is incomplete, the carrier should be required to provide an up-to-date forecast with

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[90] *See NPRM* at ¶ 58. This showing compliments SBC's recommendation that carriers certify that codes are actually "in service," and not merely "opened" in the LERG. *See* Section IV.F, *supra*.

[91] A carrier can easily meet this requirement. In most instances, a carrier likely would have an interconnection agreement in place. If not, the carrier could "MFN" into an existing interconnection agreement, *see* 47 U.S.C. § 252(i), or secure an "interim" interconnection agreement while it negotiates a permanent one. *See* 47 C.F.R. § 51.715(a).

[92] Carrier demand forecasting requirements are discussed in Section IV.C.1, *supra*.

the code request. NANPA should not be permitted to assign the code until the requesting carrier provides the required forecast.

Carriers should not be required, however, to provide NANPA other information, such as business plans and progress reports, in order to receive initial codes.[93] Such information would be highly confidential, and carriers should not be required to disclose confidential information except where it is absolutely necessary (such as in the case of demand forecasts). In any event, business plans are highly subjective and would not provide concrete and verifiable information to verify a carrier's need for an initial code.

2. Growth Codes

Verification of need for growth codes is somewhat easier for policy makers than verification of need for initial codes. The requesting carrier already has resources assigned to it in the specific rate center area, and the carrier can and should be required to prove that it is using those numbers efficiently before it receives more. SBC thus strongly supports the NPRM's tentative conclusions that carriers should be required to provide data supporting growth code requests, and the conclusion that NANPA should be directed not to assign a growth code to a carrier unless and until a carrier demonstrates its need for the additional numbers.[94]

As discussed in Section III, above, SBC proposes a phased-in utilization threshold, in which carriers would be expected to meet a specified and increasing utilization threshold in order to receive additional numbering resources in an area (except in very limited, specific circumstances) after an initial phase-in period. This proposal uses a hybrid MTE/utilization level during the phase-in period, and a utilization threshold with limited

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[93] *See NPRM* at ¶ 58.

[94] *See NPRM* at ¶ 59.

exceptions thereafter in major metropolitan areas. This Section discusses the specific details of the proposal.

(a) The Hybrid "Months To Exhaust"/Utilization Verification Mechanism

As the NPRM notes, the current MTE process is highly subjective and cannot be verified until after a carrier receives the requested resource.[95] These criticisms are valid, in part because there is no audit or enforcement mechanism to ensure that MTE demand forecasts are reasonable, but also because the demand projections in any MTE involve some degree of subjectivity. SBC thus proposes that MTEs be phased out in favor of a utilization threshold, and that a hybrid MTE/utilization method be used to verify the need for numbering resources while the utilization threshold is phased in.

During the three-year phase-in of the utilization threshold, all requests for growth codes would be accompanied by a modified version of the Months to Exhaust ("MTE") worksheet required by the CO Code Assignment Guidelines.[96] In the modified MTE worksheet, the requesting carrier would provide (all at the LCAP level): LCAP utilization percentage; total "assigned" telephone numbers; total telephone numbers "available for assignment;" and the estimate of the number of telephone numbers required to meet projected demand for six months.[97] If the LCAP utilization rate is above the Commission's utilization threshold, or if the

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[95] *See NPRM* at ¶ 61.

[96] *See* ATIS/INC, Central Office Code (NXX) Assignment Guidelines, INC 95-0407-008, at § 3.2 & Appendix B (rev. Apr. 26, 1999) <http://www.atis.org/atis/clc/inc/incdocs.htm> [hereinafter *CO Code Guidelines*].

[97] The forecast should span the length of time that a carrier is permitted to retain in inventory. SBC recommends that carriers be permitted to hold a six month inventory of numbers, so it recommends a six month demand forecast for the form. The draft Thousand Block Pooling Administration Guidelines permits a nine month inventory, and if the Commission accepts this proposal, the MTEs should include a nine month demand forecast. *See* Thousand Block (NXX-

total number of telephone numbers demanded exceeds the total number of numbers available, NANPA should assign the requested code.

In some situations, a carrier may need new numbering resources even where the projected quantity of demand does not exceed available supply. The carrier might, for example, have a specific customer request for several thousand contiguous numbers, or have to comply with a commission mandate for an optional calling plan in an area. In rare instances, carriers might need dedicated NXXs for a new service with unique calling rating requirements. In such a circumstance, the carrier would be required to provide a written statement of the need for the additional resource. If the carrier provides a written statement that explains the need for the additional numbers, NANPA should assign the requested code. If the carrier does not prove a numerical need for the code and does not provide a written statement of need, NANPA should suspend the request and refer the matter to the state commission for its consideration. MTEs should be reviewed and evaluated as part of random audits, and any carrier who is found to have willfully provided false or misleading information should be subject to an enforcement proceeding before the Commission and potential penalties.

The NPRM questions whether NANPA should "evaluate" the showing of need on the MTE prior to assigning a code.[98] SBC believes that it would be inappropriate for NANPA to make such subjective judgments. The carrier should have the responsibility to provide sufficient information to allow ready evaluation of the need for the code.

If a carrier believes that its code request has been denied unjustly, it should have the right to challenge the denial before the relevant state commission. The state commission

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X) Pooling Administration Guidelines, Draft (INC 99-0127-023), § 8.1 (rev. Jan. 27, 1999) <http://www.atis.org/atis/clc/inc/incdocs.htm> [hereinafter *Thousand Block Pooling Guidelines*].

should be delegated the authority to hear such disputes and to direct NANPA to grant or deny the request. If the state commission orders that the request be denied, the carrier should have the right to appeal the state commission decision to the Commission. To avoid excessive delays that could threaten the carrier's ability to provide service, a carrier should have the right to bring the issue to the Commission if the state commission does not act on its request within 30 days.

(b) The Utilization Threshold Verification Mechanism

As discussed in Section III above, by the end of the phase-in period carriers would be expected to have LCAP utilization of 70 percent or more in order to receive a growth code in the largest metropolitan areas of the country.[99] However, to ensure that carriers who have a legitimate and demonstrable need for additional numbers can receive the resources they need, limited exceptions would be needed to allow additional numbers to be assigned to carriers who do not meet the utilization threshold. To ensure that the exceptions are properly limited and are subject to uniform requirements, the Commission should direct the NANC to develop a list of the exceptions that would be permitted and the information that would have to be supplied by the carrier to NANPA to satisfy the exception. As with the MTE process, the NANPA should be given sufficient information so that it can readily ascertain if the requesting carrier has provided all required information and established a need for additional numbers, and disputes should be referred to the appropriate state commission for resolution, with appeals to the Commission if necessary.

If the Commission is to achieve its stated goals and objectives in this proceeding, it needs to adopt a single utilization threshold for all carriers. It should not adopt different

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[98] *See NPRM* at ¶ 61.

thresholds for different industry segments or geographic area within the largest 100 MSAs.[100] Most fundamentally, setting a lower utilization rate for some classes of providers could undercut the effectiveness of the other policies adopted in the proceeding and prevent the Commission from appreciably slowing the pace of area code exhaust. This is particularly true for new entrant wireline carriers, who are a major contributor to the heightened demand for NXX codes that is driving the rapid pace of area code exhaust. Moreover, any rule that set different standards based on industry segment would be discriminatory on its face and would therefore violate competitive neutrality.

For area codes outside the largest 100 MSAs, the Commission should continue to require the hybrid process after the end of the phase-in period. However, the Commission should encourage carriers to use these processes for code requests in areas outside the largest 100 MSAs, and it should extend this requirement beyond the largest 100 MSAs in the future if code demand warrants additional requirements.[101]

C. THE COMMISSION SHOULD ADOPT DETAILED REQUIREMENTS GOVERNING REPORTING AND RECORD-KEEPING OF CARRIER UTILIZATION AND DEMAND FORECAST DATA

SBC strongly supports strengthening the current system for industry forecasting and utilization reporting by adopting comprehensive reporting and record-keeping requirements.[102] The current NXX code demand forecasting system has far too often seriously failed to accurately forecast the life of area codes. There have been no standards for the industry

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[99] As explained in Section III, SBC recommends a uniform utilization rate be applied to all carriers.

[100] *See NPRM* at ¶¶ 67-68.

[101] If the Commission imposes the utilization threshold requirement in rural areas, it should phase in the requirements coincident with area code relief, and carriers should be required to use the utilization threshold only in area codes forecasted to exhaust within five years.

to report utilization, and utilization data has not been routinely compiled, and, when it has, it has not been particularly useful.

To properly manage numbering resources, carriers and regulators need accurate data of how numbering resources are used today and how they are likely to be used in the future. Disclosure of accurate and reliable utilization data to regulators also would give carriers a strong incentive to use numbering resources efficiently, thereby aiding in enforcement of policies already in place.

At the same time, however, the Commission should recognize that detailed reporting and record-keeping can be extremely costly, and all carriers, to one degree or another, would be required to bear these costs. Thus, the Commission should make sure that its policies for developing, collecting, and reporting this data are cost effective, and it should focus more extensive requirements on those areas where demand for numbering resources is at a premium.

1. The Industry Demand Forecasting Tool: The "Hybrid Model"

At its June meeting, the NANC selected a new numbering resource demand forecasting tool, and it recommended that the Commission adopt this new forecasting methodology to replace the Central Office Code Utilization Survey, or "COCUS." The NANC based its recommendation on extensive investigation of the various alternatives by its Numbering Resource Optimization working group. The working group extensively studied the shortcomings of the COCUS, and evaluated several alternatives, including the Line Number Utilization Survey ("LINUS"), the Thousands-Block Pooling Guidelines, and recommendations made by AT&T and US West. The working group then combined portions of several of these options into a "Hybrid" model, which it recommend to the NANC and the NANC in turn recommended to the

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[102] *See NPRM* at ¶ 69.

Commission. SBC played an active role in the working group evaluation, and it supports the NANC's recommendation of the Hybrid model.

In evaluating the Hybrid model and the other tools proposed in the NANC, the Commission needs to recognize that the data provided as input to the models is more important than the structure of the models themselves. The *single most important factor* to the accuracy of any of these forecasting models is the accuracy of the data provided. The extremely poor results recently obtained from the COCUS in some areas has more to do with the lack of data from all numbering users, and the inaccuracy of the data provided, than it has to do with the inadequacy of the COCUS model. A new and improved forecasting model might improve this situation marginally, but changing the model is not enough; the Commission also needs to ensure that the quantity and quality of the data input to the model is sufficient to allow the model to produce accurate results.

To ensure the requisite quantity of data, the Commission should mandate that all entities receiving numbering resources comply with data collection requirements. The most efficient and cost-effective way to enforce this requirement is by withholding additional resources. Thus, the Commission should direct NANPA not to assign numbering resources to a carrier unless and until it complies with forecasting and utilization reporting requirements for the relevant area code. To improve the quality of data, the Commission should direct the NANC to develop and recommend to the Commission forecasting procedures for carriers.

2. Carrier Numbering Resource Utilization Data

Before industry forums, state commissions, and this Commission, SBC has repeatedly stressed that accurate and reliable utilization and demand forecast data is absolutely

essential to developing effective number optimization policies.[103] To date, however, no comprehensive, accurate, and reliable survey of utilization has been performed. NANPA and a couple of state commissions, including the States of Colorado and Texas, have attempted to perform such surveys, but carriers have not fully participated in the absence of a Commission requirement to participate, or submit data that is widely divergent, apparently due to the lack of uniform definitions of numbering usage categories.[104] Because not all carriers have provided forecasts of future NXX code demand, industry forecasts in some areas have underestimated demand and substantially overstated projected area code lives, sometimes dramatically.

SBC thus strongly supports the Commission's tentative conclusion that it should mandate that all users of numbering resources provide accurate forecast and utilization data to the NANPA.[105] SBC also supports the Commission's tentative conclusion that it should establish "a more extensive, detailed, and uniform reporting mechanism that will improve numbering utilization and forecasting on a nationwide basis," and that NANPA should serve as the single point of collection of utilization and forecast data.[106]

Carriers should submit utilization data to the NANPA on an aggregated basis, to simplify the aggregation and reporting processes and to minimize charges from the NANPA for data aggregation and manipulation. Where TBNP is implemented, participating carriers should report utilization at the thousands block level, to verify that resources are being used efficiently and to aid reclamation. Carriers that do not participate in TBNP should report utilization at the

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[103] *See, e.g., SBC NRO Report Comments*, *supra* note 2, at 9-10.

[104] In fact, the NANPA did not provide utilization information with the 1999 COCUS, claiming that the data was incomplete and "highly suspect." NANC Meeting Minutes, May 25-26, 1999, at 11.

[105] *See NPRM* at ¶ 73.

[106] *See id.*

LCAP level. All carriers should report utilization at the LCAP level in areas where TBNP is not implemented.[107] The reported categories should be: (a) the total quantity of assigned numbers, (b) the total quantity of "numbers unavailable for assignment," and (c) the total quantity of numbers "available for assignment." Carriers should be required, however, to collect and maintain data in the disaggregated number usage categories, and to provide such data in the event of an audit.

Carriers should be required to submit demand forecast data to NANPA at the rate center level, since codes would be requested and assigned by rate centers. However, carriers should prepare their forecasts at the LPAC level, and should maintain records showing the use of the LPAC calculations in developing forecasts. These records would be provided to auditors in the event of an audit.

SBC disagrees with the Commission's tentative conclusion that carriers should be required to provide utilization and forecast data on a quarterly basis.[108] Having new data every six months should be sufficient, particularly with improved demand forecasting. Requiring more frequent data submission merely increases costs for carriers and the NANPA unnecessarily.

The Commission should require that carriers provide utilization and forecasting data every six months for numbers in area codes within the largest 100 MSAs; more frequent or detailed data reporting would be unnecessary and expensive. To economize on costs, utilization data should not be required for area codes that are outside the largest 100 MSAs. Outside the largest 100 MSAs, carrier demand forecasts should be provided annually.[109] These data

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[107] *See NPRM* at ¶ 74.

[108] *See NPRM* at ¶ 77.

[109] *See NPRM* at ¶ 77.

submissions should be part of the industry-wide utilization and forecast process, and should not be in addition to the existing requirements.[110]

3. Calculating Utilization

(a) The "Lowest Code Assignment Point"

SBC recommends that most utilization measurements (except for the utilization to determine which carriers would be required to participate in TBNP) be calculated at the "Lowest Code Assignment Point" for the carrier. The LCAP is the lowest point at which a carrier assigns resources in an area, and it accurately reflects the requesting carrier's actual need for additional number resources. In an area where a carrier has more than one switch serving a single rate center (such as a major metropolitan area), the LCAP would be at the requesting switch. Because numbers are assigned and routed to each switch, the codes effectively are assigned at the switch level. In areas where a single switch serves more than one rate center, the LCAP would be the rate center. The LCAP measures code demand where it actually arises, and it therefore provides a more accurate measure of a carrier's need for additional numbers.

As an example, assume a carrier serves a single rate center with two switches – one that serves the eastern half of the rate center, and one that serves the western half of the rate center. Assume further that the eastern switch has two NXX codes and is facing exhaust, with 90 percent of its numbers utilized, while the western switch has ten NXX codes and plenty of numbers available, with 50 percent utilization. If utilization is calculated by LCAP, utilization for the eastern switch would be 90 percent, and the LCAP utilization rate would properly reflect the need for additional numbers for the eastern switch, while utilization for the western switch

[110] *See NPRM* at ¶ 75. Of course, "jeopardy forecasts" should continue to be available for the industry, where required. *See NPRM* at ¶ 77.

would be 50 percent, and the LCAP utilization rate would properly reflect the lack of need of resources for the western switch. If, however, utilization is calculated at the rate center level, in contrast, the reported utilization rate would be only 57 percent, which would substantially understate the need for numbers in the eastern switch and overstate the need for numbers in the western switch.

(b) The Utilization Calculation

SBC supports the NPRM's proposal for calculating utilization rates, which divides the total quantity of telephone numbers "unavailable for assignment" by the total quantity of numbers assigned in the relevant geographic area.[111] This is simple, straightforward, and properly uses the numbering categories that have been carefully devised by the industry. A simple utilization calculation would have the practical advantages of making utilization calculations easily understood while guaranteeing credibility to the calculation.

The Commission should not exclude any categories of numbers from the "unavailable for assignment" category in order to prevent possible abuses. Excluding specific categories (such as dealer number pools or utilization) could seriously interfere with existing marketing and service offerings that are important to consumers. The audit and enforcement processes should be sufficient to detect and discourage any abuses.

Of course, utilization is calculated within specific geographic areas, and SBC suggests that different geographic areas be used for different purposes.[112] Where TBNP is implemented, carriers participating in TBNP should report their utilization to NANPA by thousands-block. Other carriers, and all carriers in non-pooling areas, should report their

[111] *See NPRM* at ¶ 64.

[112] *See NPRM* at ¶¶ 66, 76.

utilization to NANP by LCAP.[113] For the purposes of determine which carriers participate in TBNP, since the decision of whether a carrier should be required to pool should be based on utilization for an entire area code, carriers should report their utilization to NANPA by area code.

4. Reporting Utilization Data

NANPA or the pooling administrator ("TBNPA") should be responsible for collecting, verifying, aggregating, and reporting utilization data to the industry, the Commission, and state commissions. NANPA/TBNPA should be under strict obligations to maintain the confidentiality of carrier-specific forecast and utilization data, and it should be prohibited from disclosing carrier-specific data (including data aggregated in such a manner that carrier-specific data can be derived from the data provided). Information should be reported for each data collection cycle (every six months or every year).

Requiring disclosure of carrier-specific data to regulators could be one of the most efficient and effective means available to the Commission to improve carrier utilization. A carriers is unlikely to use numbers inefficiently if it knows that the Commission and state commissions will be notified of its behavior. Thus, SBC strongly encourages the Commission to require NANPA/TBNPA to provide carrier-specific utilization data to the Commission and to those state commissions that request it and that have legal processes in place to maintain the confidentiality of carrier-specific data and have entered into non-disclosure agreements. State commissions that do not enter into non-disclosure agreements should be provided with reports detailing utilization by industry segment. Of course, NANPA/TBNPA should give each carrier a report of the information provided to regulators regarding that carrier. NANC should be charged

[113] *See NPRM* at ¶ 76.

with the task of designing standardized forms for reporting utilization to the Commission, state commissions, and carriers.

D. THE COMMISSION SHOULD INITIATE A COMPREHENSIVE AUDIT PROGRAM

SBC strongly supports the Commission's proposal to adopt a "comprehensive audit program that verifies carrier compliance with federal rules and industry numbering guidelines."[114] Audits provide the best means to ensure that all carriers comply with the rules. At the same time, however, audits are an extremely costly and time-intensive enforcement mechanism. Accordingly, the Commission should ensure that any audit program is comprehensive and is carefully structured to achieve the maximum benefits at the lowest cost.

1. Types of Audits

SBC recommends that the Commission's audit program consist of two types of audits – "for cause" audits, and random audits. "For cause" audits are absolutely essential to ferret out carriers that are violating the Commission rules and industry guidelines. Because these audits should be performed only in situations where there is a high probability of a violation, these audits are most likely to detect violations and increase enforcement. SBC thus supports the Commission's tentative conclusion that it should require "for cause" audits as part of its audit program.[115] Random audits would be less likely to uncover violations than "for cause" audits, but would be likely to encourage a substantial number of carriers to comply with the rules, due to the ever-present risk of being audited, and thereby would provide substantial benefit for the resources expended.[116] Random audits, if they are truly random, should serve as a strong

[114] *NPRM* at ¶ 83.

[115] *See NPRM* at ¶ 85.

[116] *See NPRM* at ¶ 87.

deterrent to any carrier provider who might otherwise use numbering resources for personal gain without regard to the consequences to society.

Regularly-scheduled audits, in contrast, would be extremely cost-intensive and would be less likely to increase compliance than either "for cause" or random audits.[117] Presumably, all carriers would be aware of the audit requirement, and have some notice of when the audit would be conducted (due to the regularity). Because all carriers would be subject to audit, it is less likely that any single audit could be comprehensive. A carrier who is intent on violating the Commission's rules and industry guidelines could be unscrupulous enough to attempt to avoid detection in a non-intensive, generic audit. However, such a carrier would be less likely to escape detection in a random audit, for which it would be unprepared, or a "for cause" audit, which should be more intensive and focused on questionable behavior.[118]

2. Selection of the Auditor

It is absolutely essential that the auditor be entirely neutral. The NPRM suggests the NANPA, the Commission, state commissions, or "other neutral third parties" might have some responsibility for audits.[119] SBC believes that NANPA should not be auditor, because the NANPA itself is subject to audit for the very same numbering administration compliance as carriers, and audits of carriers very well might implicate the NANPA's behavior. Thus, having the NANPA serve as the auditor would place NANPA in a potential conflict of interest. SBC also opposes appointment of state commissions as auditors; even if all state commissions had sufficient resources and were willing to perform this function, many different agencies would

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[117] *See NPRM* at ¶ 86.

[118] Random audits can provide some of the same benefits as those provided by regularly scheduled audits, at a fraction of the cost, if a carrier's chance of being audited is sufficiently high.

likely result in many different standards, audit processes, and varying degrees of neutrality. These differences could undermine the Commission's effort to create a uniform national audit program. While the Commission could serve as the auditor, the Commission could play a more valuable role as overseer, administrator, and enforcer of the audit program.

Thus, SBC believes that an independent third party would be the best choice to serve as auditor. At its July meeting, the NANC recommended a competitive bid process to select the auditor. [120] SBC agrees that the Commission should direct the NANC to recommend the entity that should be selected as the auditor.

3. Development of Audit Procedures and Safeguards

SBC agrees with the Commission that the audit program "should address all aspects of carrier compliance with [Commission] rules and industry numbering guidelines...,"[121] and it recommends that the Commission require the NANC to develop these procedures. At this time, no industry group is actively developing the type of comprehensive audit procedures that will be necessary to implement the type of audit program envisioned by the Commission. It undoubtedly would aid the NANC if the Commission describes its expectations for an audit program and suggested procedures in some detail in its order in this proceeding. To that end, SBC offers the following observations.

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[119] *See NPRM* at ¶ 88.

[120] The NANC also recommended that Lockheed Martin be permitted to bid on the auditing function. With appropriate structural separations that ensure neutrality, it is possible that Lockheed Martin could be selected as the auditor despite its current role as NANPA; however, the structural separation requirements would have to be sufficient to ensure that the auditor remained completely neutral, and the bid price would have to be substantially less than competing bids, in light of the risk of a breach in neutrality.

[121] *NPRM* at ¶ 89.

Safeguards are essential to the auditing process, and they should inherently arise out of the procedures adopted for the audit program. Carriers should not be subject to costly and time-consuming "for cause" audits unless "cause" truly exists to believe "that the information a carrier has provided...is inaccurate or misleading."[122] Thus, there should be a review and verification of the existence of "cause" by an independent party before any "for cause" audit is conducted. The Commission should be the entity to determine whether there is sufficient "cause" to justify a "for cause" audit. This independent review also would allow a wide range of parties to recommend "for cause" audits. For example, state commissions and the NANPA/TBNPA could be encouraged to provide any information that they believe is sufficient to establish "cause" to the Commission, which could then review the evidence and determine whether sufficient "cause" exists to trigger an audit.[123]

As a further safeguard against potential misuse of auditing authority, procedures should provide for reimbursement of carriers' cost of undergoing "for cause" audits, if and to the extent that the audit fails to uncover violations. Carriers should not have to bear the costs of an audit that was not justified in the first instance, and a reimbursement mechanism would discourage "fishing expeditions" and encourage audits for the strongest cases. At the same time, carriers who are found in a "for cause" audit to have violated the Commission's rules,

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[122] *NPRM* at ¶ 85.

[123] The NPRM asks whether subsequent "follow up" audits should be required for carriers that are subjected to "for cause" audits. *See NPRM* at ¶ 85. Follow up audits should not be required, and should not be permitted unless the carrier is found to have committed some violation. Common sense dictates that if a carrier is found to have violated the rules or guidelines, any evidence that suggests the carrier may be resuming the same behavior would naturally trigger a subsequent audit. Sufficiently egregious behavior might even require follow up audits. But the Commission (if it were the party reviewing for "cause") should not presume follow up audits would be required or even necessary unless verified facts justify another audit.

regulations, or industry guidelines should be required to reimburse the rest of the industry for the cost of the audit.

Similarly, procedures should be developed to ensure that "random" audits are truly random, and are not directed at any particular carrier or industry segment. Randomness not only provides the best deterrent affect, it also guarantees that carriers are treated in a truly neutral and even-handed manner.

Audit reports will almost certainly contain a substantial amount of confidential and proprietary information about a carrier's business practices, operations, and potentially even business strategy. In most instances, audit results should be reported only to the provider and the Commission. In rare instances, if the results require that the Commission open a proceeding (for example, an enforcement proceeding), some conclusions of the audit report may become part of publicly available information, but the Commission should ensure that any confidential and proprietary information remains confidential.

E. THE COMMISSION SHOULD STRENGTHEN AND IMPROVE ENFORCEMENT PROCESSES

The NPRM tentatively concludes that the NANPA, state commissions, and the Commission all should play a role in enforcement of numbering administration rules, and it seeks comment on how authority should be allocated between these entities.[124] SBC agrees. To maximize efficiency and effectiveness, and to ensure that undue power is not concentrated in a single entity, SBC suggests that (1) the NANPA should have the authority to apply industry guidelines, including withholding and reclaiming numbering resources in accordance with those guidelines, but it should not be given discretionary authority to take "enforcement" action against

[124] *See NPRM* at ¶ 92.

carriers, (2) state commissions should have the authority to order the NANPA to withhold or reclaim numbering resources in order to enforce the guidelines and the Commission's rules, and (3) the Commission should have the authority to review decisions by the NANPA and state commissions, and to impose fines and penalties, where appropriate.[125]

The NANPA should not be given "discretionary" authority to enforce the guidelines. Neutral, unbiased *administration* is required of a code administrator, not policy-making discretion. Paradoxically, the more the NANPA acquires additional discretionary authority, the more its credibility as a neutral, even-handed administrator is subject to challenge; the more it uses that discretion, the more the Commission's entire number administration system is undermined. The NANPA should be required to apply the industry guidelines and Commission rules and regulations in a fair and even-handed manner. To the extent there is any ambiguity in the guidelines, rules, or regulations, the NANPA should not have the discretion to choose how to interpret them – instead, it should ask the Commission how they should be interpreted. And the NANPA's enforcement authority, therefore, should not be based in any discretionary authority granted to the NANPA; instead, it should have the authority, and the responsibility, only to apply the guidelines, as it is told to do so by the Commission.

Under this paradigm, the NANPA should have the authority to refuse to assign or to reclaim numbering resources only where the guidelines, rules or regulations require it to do so. (Of course, the NANPA also has the ability to refer matters to regulators for enforcement). The NANPA is obligated under existing guidelines (and should be directed to do so to the extent that it doubts such direction), to withhold numbering resources from providers who have not provided

[125] To the extent that the Commission orders TBNP, the TBNPA should have the same responsibilities for enforcement for TBNP-participating carriers that NANPA would have for

sufficient information to meet the requirements established in the industry guidelines. Similarly, the NANPA is obligated under existing guidelines to reclaim NXX codes that carriers are not "activating" within six months after assignment.[126] If necessary (and it should not be), the industry guidelines should be revised to make certain the NANPA's obligations.

State commissions can and should play a valuable role as the "policemen" of the numbering administration system. They have substantially more "eyes and ears" which they can use to detect violations. State commissions should be authorized to order code reclamation, and it should be allowed to assist and advise the NANPA on assignment issues.

All other enforcement authority should remain with the Commission. The Commission should retain the authority to review decisions of the NANPA and the state commissions concerning reclamation, assignment, and interpretation of the industry guidelines, and its rules and regulations. The Commission should be the only entity that imposes fines or other penalties on carriers. In this manner, the Commission can ensure that numbering policies are being implemented correctly and uniformly, and it can ensure that numbering administration complies with the Commission's regulations and Congress's mandate to the Commission.[127]

F. THE COMMISSION SHOULD IMMEDIATELY ENSURE THAT UNUSED NUMBERING RESOURCES ARE RECLAIMED

Although SBC believes that the NANPA has sufficient authority under the existing Central Office Code Administration Guidelines, SBC supports modifications to those guidelines to strengthen reclamation requirements and to mandate that the NANPA use its authority to reclaim unused NXX codes. As the NPRM notes, the NANPA has expressed "some

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non-pooling carriers.

[126] *CO Code Guidelines, supra* note 96, at § 6.3.3.

[127] *See* 47 US.C. § 251(e)(1).

hesitancy" in using its reclamation authority.[128] There is no excuse for the NANPA abdicating its responsibility in this area, the current situation cannot be allowed to continue. As previously mentioned, SBC is aware of more than *100 assigned NXX codes* today in the SWBT five-state region that are opened in switches and appear "activated" in the LERG but are not "in service." There may be many more NXX codes that are activated and interconnected to the tandem listed in the LERG, but are not assigned to any customers. There is no excuse for assigned resources to be unused; these resources should be reclaimed immediately and assigned to carriers who actually need numbers at this time. SBC thus recommends that the Commission take several actions to resolve this problem in a swift and certain manner.

First, the Commission should direct the NANPA to immediately begin exercising its authority to reclaim unused resources. Section 6.3.3 of the Central Office Code Administration Guidelines, entitled "Code Use," states:

> Code assignments are made subject to the conditions listed in Section 4. A code assigned to an entity, either directly by the Code Administrator(s) or through transfer from another entity, *should be* ***placed in service*** *within 6 months* after the initially published effective date. ***Certification of in service will be required*** (see Central Office Code (NXX) Assignment Request and Confirmation Form - Part 4). If the assignee no longer has need for the code, the code should be returned to the Code Administrator(s) for reassignment. *If it is determined through the audit process or other means that a code is not in use after 6 months as noted above, the Code Administrator(s) will request the return of the code.*[129]

[128] *See NPRM* at ¶ 95.

[129] *CO Code Guidelines, supra* note 96, at § 6.3.3 (emphasis added).

"In service" is defined in the guidelines as "[a]n active code in which *specific subscribers...are utilizing* assigned numbers."[130] Similarly, Section 5.0 of the Guidelines, entitled "CO Code (NXX) Assignment Functions" states the "[t]he Code Administrator(s) *shall...*"

> *Ensure that the code applicant places the code in service within the time frame specified in Sections 6.3.3* and 4.4 of these guidelines. If the assigned code is not used within this time frame, *the Code Administrator(s) shall request the return of the code* for reassignment.[131]

There is no reasonable ambiguity in the obligations of NANPA or applicants in the guidelines: the guidelines clearly require that carriers place codes "in service" within six months, which in turn requires that "specific subscribers or services ... utiliz[e]" some portion of the numbers assigned. The NANPA's obligation is similarly clear: it "will" or "shall" "request the return" of an NXX code if a carrier fails to place the code in service, and it is obligated to "ensure" that codes are placed in service in time.

There is no excuse for the NANPA failing to exercise this authority or fulfill its responsibility. The Commission's regulations require that the NANPA comply with the guidelines,[132] and the NANPA should not be permitted to ignore the Commission's regulations.

Second, the Commission should clearly inform all carriers that the "Part 4" certifications (referenced in guidelines section 6.3.3, above), which is supposed to certify that a NXX code has been placed "in service," actually certifies that numbers within an NXX code are assigned to end user customers. Some carriers today may be providing "Part 4" certifications on

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[130] *Id.* at § 13.0 (emphasis added).

[131] *Id.* at § 5.0 (emphasis added). Similarly, the NANPA Requirements Document, NANPA is obligated to "[v]erif[y] that applicants place the codes in service within the time frames specified in the CO Code (NXX) Assignment Guidelines." NANC, NANP Administration Requirements Document, at § 5.2.2(7) (Feb. 20, 1997) <http://www.fcc.gov/ccb/Nanc/>.

[132] 47 C.F.R. § 52.13(b)(3).

the basis that a code has been "activated" in the LERG. The Commission should put carriers on notice that such a practice could subject the carrier to enforcement proceedings before the Commission. In addition, all carriers should be required to re-certify that all of their currently assigned NXX codes are "in use."

Third, the Commission should require all carriers to provide networking information on "initial" code requests, as explained in Section IV.B.1 above. If a carrier is required to provide information on its point of interconnection when it submits its code request, then codes need not sit idle while the carrier completes its interconnection arrangements, installs facilities, and the like.

Fourth, SBC supports the Commission's proposal that the NANPA be directed to initiate code reclamation within 60 days of the expiration of the activation deadline.[133] SBC agrees that imposing a specific deadline on the NANPA would likely increase reclamation and "encourage better recycling of NXX codes."[134]

Fifth, SBC supports the Commission's proposal to reduce the NXX code reservation interval.[135] As noted in the NPRM, the current industry guidelines permit an initial 12 month reservation, with a six month extension. SBC recommends that the initial reservation period be shortened to six months, permitting a maximum reservation period of 6 months, with a single 6 month extension. No extension beyond a 12 month period should be granted to any

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[133] *See NPRM* at ¶ 99.

[134] *See id.*

[135] *See id.*

provider for any reason. In SBC's opinion, reserving numbering resources for over a year with no services being offered suggests no real plan in place to utilize the requested resource.[136]

Finally, the Commission should, as discussed above, authorize state commissions to reclaim unused NXX codes. The state commissions have to bear much of the public concern regarding area code relief, and it is reasonable to assume that most commissions would act swiftly to reclaim unused codes, even if the NANPA does not do so.

G. THE COMMISSION SHOULD PROVIDE AN EFFECTIVE COST RECOVERY MECHANISM FOR ADMINISTRATIVE PROCEDURES

SBC supports the Commission's tentative conclusions regarding cost recovery for these administrative measures. SBC agrees that some of these administrative measures would involve new responsibilities for the NANPA, and possibility (in some cases) new charges as well. To the best of SBC's knowledge, no estimates of these costs have been prepared at this time. Auditing likely would be a second major source of costs, and, like the NANPA costs, would have to be paid to an independent entity if a third-party serves as the auditor.[137] These SBC agrees that these costs must be recovered in a competitively neutral manner, and would best be recovered using the existing NANPA fund formula, and through the NANPA fund.[138]

Finally, there will be some carrier-specific costs to comply with the plethora of new administrative requirements, including the reporting and record-keeping requirements. SBC

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[136] While the Commission is on the right track in seeking to shorten the permitted reservation period, the NPRM's three months/30 day proposal (*see NPRM* at ¶ 99) may be too aggressive for many new entrants, particularly new entrants are required (as they should be) to provide detailed interconnection information in initial code requests. *See* Section IV.B.1, *supra*. SBC suggests that it would be better to ensure that carriers have a longer reservation period, and that they in turn be responsible for doing the groundwork to ensure that they provide the information necessary to ensure the initial codes are place "in service" promptly.

[137] Because some auditing costs would be paid for by the carrier audited, *see* Section IV.D.3, *supra*, only "net" auditing costs should be recovered through the NANPA fund mechanism.

recommends that these carrier-specific costs be recovered in the same manner as number pooling costs.[139]

V. THE COMMISSION SHOULD ADOPT A LIMITED AND FOCUSED APPLICATION OF TBNP IN ORDER TO PROVIDE MAXIMUM BENEFITS AT THE LEAST SOCIETAL COST AND ALLOW FULL COST RECOVERY FOR CARRIERS

SBC supports a limited deployment of TBNP in those instances where a carrier's average utilization in an NPA falls below a reasonable threshold in areas in the largest 100 MSAs, and only where carriers receive full cost recovery for the costs of implementing TBNP.[140] To ensure that the benefits of thousands block number pooling exceed the costs, the Commission should only require that LNP-capable carriers who have low utilization implement TBNP. In addition, at this time the Commission should limit thousands block number pooling to the largest 100 MSAs. Third, the Commission should mandate implementation of the "Efficient Data Representation" method developed by the industry by all carriers participating in LNP in areas where thousands block number pooling is implemented. These points, and responses to the Commission's other inquiries regarding number pooling, are addressed below.

A. TBNP SHOULD BE REQUIRED ONLY FOR LNP-CAPABLE CARRIERS WHO DO NOT MEET THE COMMISSION'S UTILIZATION THRESHOLD IN THE LARGEST 100 MSAS

SBC previously has expressed concern that number pooling could be an expensive long-term solution to what could be a temporary problem.[141] SBC continues to have reservations concerning TBNP due to the enormity of the costs to implement TBNP and the possibility that

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[138] *See NPRM* at ¶ 103-04.

[139] *See* Section V.D, *infra*.

[140] *See NPRM* at ¶¶ 13-214 (discussing number pooling issues).

[141] *SBC NRO Report Comments*, *supra* note 2, at 5.

the pace of footprint expansion (and thereby the pace of area code relief) might decrease naturally by the time TBNP is implemented. As the NPRM correctly notes, SBC estimates that TBNP implementation by its incumbent local exchange carriers would cost between $160 and $190 million,[142] and it will take substantial time to implement and deploy – 12 to 15 months for implementation alone, as discussed in more detail in Section V.C, below. Because the current rapid pace of area code exhaust appears to be a short-term problem, created largely by the rapid influx of new entrants into wireline local exchange markets, there is some risk that by the time that carriers spend the time and money to implement TBNP, the high demand for NXX codes and the rapid exhaust of area codes may already be slowing down. These concerns counsel caution and prudence in considering whether, and to what extent, thousands block number pooling should be required. Thus, to avoid a situation where the Commission has required expenditure of hundreds of millions of dollars with little benefit, the Commission needs to ensure that TBNP is implemented to provide the maximum benefit at the least cost.

SBC fully supports numbering resource optimization measures, including TBNP, if they are implemented in a cost-effective manner and carriers receive full cost recovery. To minimize the costs of implementing TBNP, SBC proposes a utilization threshold be used to determine which carriers are require to participate in TBNP and that TBNP be implemented only in the largest 100 MSAs.

1. TBNP Should Be Required Only For Carriers Who Fail To Meet The Commission's Utilization Threshold

On the surface, it appears completely logical that assignment of telephone numbers in blocks of 1,000 instead of blocks of 10,000 would lead to better utilization and

[142] *See NPRM* at ¶ 198.

thereby extend area code life. However, at this point, no reliable estimate exists that quantifies the benefits that TBNP could provide in delaying area code exhaust, or the relative costs and benefits of alternative means for implementing TBNP. Lockheed Martin developed a model that purported to estimate the benefits of thousands block number pooling, which was part of its NANP exhaust study. As discussed in Section II.B.1 above, this "pooling model" is as incredible as its NANP exhaust projection.[143] This pooling "model" made numerous assumptions that were clearly not practical nor realistic. As just a few examples of the flawed assumptions included in the Lockheed Martin model: (1) it assumes an unrealistically early date for deployment (1/1/2000); (2) it fails to recognize that the entire wireless industry is not LNP-capable at this time (or that paging service providers are not under any requirement to implement LNP) and therefore could not participate in number pooling at the same time as wireline carriers (if they participate at all); (3) it assumes ubiquitous deployment throughout the nation; and, (4) it fails to take into account the impact of LNP on future demand for numbering resources. Each one of these assumptions is sufficiently serious to undermine confidence in the results of the study; taken in the aggregate, they underscore the industry's assertions regarding the invalidity of the Lockheed Martin studies.

However, Lockheed Martin's model is even more seriously flawed than these assumptions, because it completely ***ignored*** *the most important factor* that drives the usefulness TBNP – the existing rate center structure. At a theoretical level, one might assume that if numbers are allocated in blocks that contain one-tenth the quantity of total numbers (1,000 as opposed to 10,000), society would realize a nine- or ten-fold increase in the efficiency with

[143] The NANC review team examined the pooling model briefly, but it did not have sufficient time to study the Lockheed Martin model or its underlying assumptions. *NANC NANP Exhaust*

which numbers are allocated. However, the benefits that would actually be achieved with TBNP are a fraction of what theory might imply, due to the existing rate center number assignment structure used by the industry, the way numbers are used by carriers and demanded by customers, and the numbers of carriers that enter a particular rate center. In essence, number pooling creates a separate "pool" of resources in each rate center, and the supply of and demand for individual telephone numbers in these rate centers is the critical factor in determining the effectiveness and efficiency of TBNP in meeting demand for numbering resources.[144]

Common sense dictates the Commission can achieve the maximum benefit for the lowest cost by limiting TBNP to those carriers who fail to meet a required utilization threshold. Obviously, these carriers are more likely to have a higher proportion of unused thousands blocks that can be contributed to number pools. Carriers with comparatively low area code-wide utilization rates also would be more likely to demand a lower volume of numbers at one time, and therefore might more efficiently use numbers in blocks of 1,000 instead of blocks of 10,000. Conversely, carriers with comparatively high utilization would contribute proportionately fewer thousands blocks, because they would have few uncontaminated thousands blocks to contribute. Additionally, because of their high utilization, these carriers also would likely demand a high volume of 1,000 blocks to meet their demand for numbering resources. In short, high utilizing carriers would supply less and demand more from number pooling and thus provide a significantly lower benefit than low utilizing carriers.

Review Team Report, *supra* note 29, at 4.

[144] There is one hypothetical instance where theory comes close to reality. If there is one carrier who needs less than 1,000 numbers in a specific rate center, and there are nine other carriers who also need less than 1,000 numbers in that very same rate center, and those carriers *have not yet received resources in that rate center*, TBNP can provide a nine-fold increase in number assignments.

A utilization threshold for TBNP has the benefit of ensuring that the Commission's policies are directed toward solving the primary cause of rapid area code exhaust – new entrant demand for initial numbering resources to establish service area "footprint." Assuming, as generally understood by the industry, that the resources currently assigned for this purpose have relatively low utilization, a substantial amount of these resources could be reclaimed in poolable thousands blocks, and these reclaimed resources would be available to other carriers, many of whom (given the current high level of footprint demand) would be seeking to establish "footprint" in the same rate center. Thus, a utilization threshold not only would be likely recapture the most underutilized resources in the NANP, but it also would make it more likely that future demand for service area "footprint" can be filled in a more efficient manner.

A utilization threshold can provide an efficient and effective means by which the Commission can control the societal cost of implementing TBNP. Every carrier that achieves a utilization rate high enough to meet the Commission's utilization threshold could minimize its costs for TBNP which in turn would permit society to avoid the high cost of ubiquitous (and less effective) deployment of number pooling.

Although some commentors may oppose using a utilization threshold for number pooling, claiming that it would have a disparate impact of different types of carriers (particularly new entrants, who have low utilization rates), the Commission should recognize that any cost-effective numbering optimization policy *must be focused on the underutilized resources* in the current numbering system. Thus, any numbering optimization policy *must necessarily* be directed toward improving utilization in underutilized resources to be effective. There can be no claim that such a policy would not be competitively neutral, for new entrants would have access

to the numbering resources they legitimately need. Carriers who do not need and cannot efficiently use a full 10,000 block of numbers, however, would be given those resources that more appropriately meet their level of demand.

In addition, in considering the disparate impact of number pooling policies, the Commission should consider that the TBNP implementation costs likely would be higher for carriers with high utilization. Two-way wireless service providers have comparatively high TBNP implementation costs, because LNP and TBNP capabilities would need to be implemented ubiquitously due to the "roaming" capabilities. Incumbent local exchange carriers would spend an extremely high proportion of TBNP implementation costs to modify their operational support systems.

Some commentors may claim (directly or indirectly) that CLECs need to be able to build a large warehouse of numbering resources in order to compete effectively with incumbent LECs. However, this is plainly contrary to the Commission's goal in this proceeding, and, if accepted, this paradigm would prevent the Commission from optimizing numbering resources or slowing the pace of area code relief. What carriers actually need is access to an adequate supply of number resources when those resources are actually and legitimately needed, not a warehouse of numbers at their disposal. With LNP, CLECs have access to working telephone numbers and reserved telephone numbers when they win a customer that has service with SBC or even another CLEC. In fact, they only need their own numbering resources for customers establishing new service, customers who wish to change their telephone number, or customers seeking to expand lines beyond the numbers reserved to them. TBNP, if implemented with a utilization threshold, would give CLECs access to large pools of unused or underused thousands blocks in existing area codes. In area codes where CLECs have a large number of

NXXs, the number of thousands blocks available from existing CLEC inventory is potentially huge. For example, in the 310 area code in Los Angeles, CLECs have 144 NXX codes, or 1,440 thousands blocks. With their relatively low demand for their own numbers, it is reasonable to assume that a large percentage of these blocks could be donated to the pool. If 80 percent of these thousands blocks were donated to a number pool, there would be *1,152* thousands blocks available for pooling, a full *31 percent* more than the number of NXX codes in an entire area code. With a utilization threshold, CLECs and all other carriers would have access to the numbers that they need to compete in local marketplaces.

2. Only LNP-Eligible Carriers Should Implement TBNP

The NPRM questions whether the Commission, in order to maximize the benefits of TBNP, could or should require carriers to implement LNP solely to participate in TBNP.[145] SBC believes that it could not and should not. LNP is extremely expensive to implement, and it should not be required unless it is mandated by the Commission in accordance with the requirements of the Act. However, requiring carriers to incur the costs of implementing *both* LNP and TBNP would be an extremely expensive way to obtain the limited benefits in numbering resource utilization that TBNP would offer, and it would make no sense to require such a large expenditure to address what is potentially a short term problem.

3. TBNP Should Be Implemented Only In The Largest 100 MSAs

SBC supports the Commission's tentative conclusion that any ordered deployment of TBNP should be limited initially to the largest 100 MSAs.[146] The largest 100 MSAs have the highest number of LNP-capable carriers, and the bulk of the current rapid area code relief is

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[145] *See NPRM* at ¶ 145.

concentrated in the largest MSAs, because this is where wireline new entrants are focusing their efforts. In adopting the phased deployment schedule for LNP, the Commission recognized that new entrants likely would choose to first enter the largest 100 MSAs. The Commission found that its phased deployment in the largest 100 MSAs

> takes in account the differing levels of local exchange competition that are likely to emerge in the different geographic areas throughout the country. Thus, our deployment schedule is designed to ensure that number portability will be made available in those regions where competing service providers are likely to offer alternative services.[147]

As discussed in Section II.A., the highest growth in numbering demand is occurring in the largest 100 MSAs, precisely because these areas have the highest growth in wireline new entrants. In addition to growth, new services requiring numbering resources are usually rolled out in major metropolitan areas. All of these factors result in a higher demand for numbering resources within the larger MSAs.

While some state commission may state that TBNP should be considered outside the largest 100 MSAs, TBNP would provide less benefit in rural areas. SBC is sensitive to the state commissions desire not to order NPA relief, even in rural areas; however, the Commission should address these concerns by modifying its area code relief policies. In most rural areas, well planned area code relief would satisfy numbering demands for many years to come.[148] Thus, SBC urges the Commission to limit TBNP to the largest 100 MSAs at this time.

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[146] *See NPRM* at ¶ 144. For area codes that are partially within the largest 100 MSAs, only the rate centers that are in the largest 100 MSAs should be included in TBNP.

[147] *Telephone Number Portability,* CC Docket No. 95-116, First Report and Order and Further Notice of Proposed Rulemaking, (¶ 82) (July 2, 1996) [*Local Number Portability 1st Report & Order*].

[148] In Texas, for example, the state commission is considering a NPA relief plan for a predominately rural area code that is projected to last *at least* 12 years.